

The Races of the Crombec *Sylvietta rufescens* (Vieillot) Occurring in the South African Sub-continent.

BY P. A. CLANCEY.

Received 25th March, 1954

The Crombec *Sylvietta rufescens* (Vieillot) is a small, short-tailed warbler of the thornveld savannas and scrubby areas of southern and south-central Africa in which geographical variation is reasonably well developed. Within the limits of the South African sub-continent two and sometimes three geographical races have been admitted by workers. Sclater, in his "Systema Avium Æthiopicarum," part ii, 1930, p.533, recognizes three South African races; Vincent, "Check List of the Birds of South Africa," 1952, p.81, admits two; while Roberts, "Birds of South Africa," 1940, p.259, recognizes only the nominate race, though in this particular instance the race *S. r. pallida* (Alexander) and the closely allied *S. w. whytii* (Shelley) appear to have been confused and united under the combination *S. r. whytii*, and Roberts should, perhaps, be credited with recognizing two South African races of *S. rufescens*. *S. whytii* is now generally conceded to be specifically distinct from *S. rufescens*, from which it differs in having no dark grey loreal and post-ocular stripes and distinctive light supercilia (see particularly Chapin, "Birds of the Belgian Congo," vol. iii, 1953, p.264). *S. rufescens* and *S. whytii* are sympatric where their ranges meet in southern Portuguese East Africa and in western Nyasaland, where the problem has been critically investigated by Benson.

Sound revisionary work on the South African races of *S. rufescens* is quite lacking, the only important note on the subject being that of Sclater and Mackworth-Praed, "Ibis," 1918, 4, pp.666-667, but a recent note by Clancey, "Ostrich," vol. xxiv. 2, 1953, pp. 127-128, has outlined briefly new advances in our knowledge, and it is the purpose of this paper to enlarge on this recent communication and discuss within the limits of the material at present available the geographical variation exhibited by the South African sub-continental populations.

Sclater and Mackworth-Praed, *loc. cit.*, recognize three races, namely, *S. r. rufescens* (Vieillot), 1817: Olifants River, western Cape Province; *S. r. transvaalensis* Sclater and Mackworth-Praed, 1918: Rustenburg, Transvaal; and *S. r. pallida* (Alexander), 1899: between Tete and Chicowa on the Zambesi River, Portuguese East Africa. Three other names have been proposed and have to be considered in any valid appraisal of the South African races, these being: *Sylviella flecki* Reichenow, 1900: Mutschumi (Machumi Pan), south of Lake Ngami, Bechuanaland; *S. r. ochrocaro* Oberholser, 1905: Damaraland; and *S. r. resurga* Clancey, 1953: Weenen, Natal.

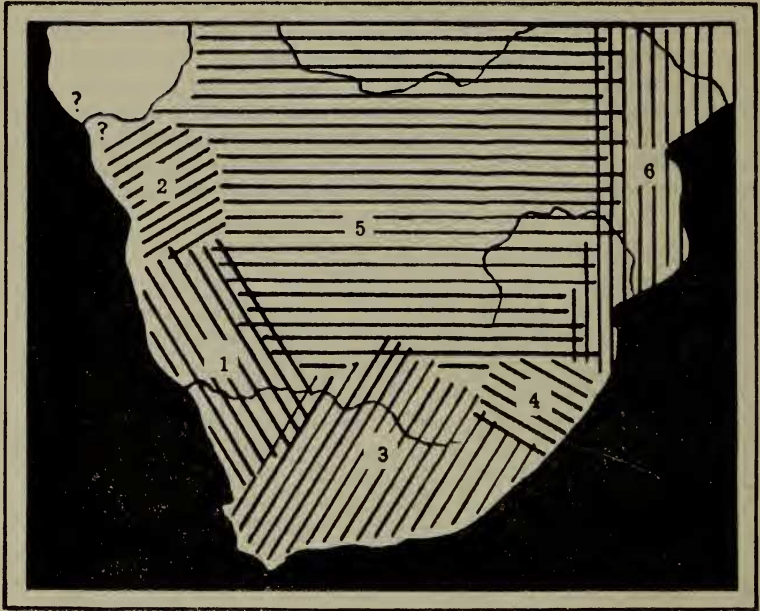
The general trend of geographical variation in the South African populations appears to be clinal in character. The populations of the southern Cape Province are the darkest both dorsally and ventrally and have the bill, particularly in the male, powerful, long and decurved (usually about 17mm.), while the populations of the lower Zambesi and contiguous areas

to the north and south represent the other end of the cline, being markedly paler throughout and the bill is appreciably shorter (usually about 15mm.). The clinal extremes are very different, and the main task is to assess the constancy and validity of the characters of the intervening populations and to estimate the extent to which names can be used to advantage in the breaking up of this cline into a series of races worthy of recognition by modern standards. Through the great kindness of the Directors of the following museums I have been able to examine a large number of specimens of critical importance in such a study: South African Museum, Cape Town; East London Museum; Kaffrarian Museum, King William's Town; Durban Museum; Natal Museum, Pietermaritzburg; Transvaal Museum, Pretoria; National Museum of Southern Rhodesia, Bulawayo; Museu Dr Alvaro de Castro, Lourenço Marques.

Described by Vieillot on the basis of two figures on pl. 35 in Levaillant, "Histoire Naturelle des Oiseaux d'Afrique," vol. iii, 1802, nominate *S. rufescens* presents certain difficulties owing to the occurrence of two geographical races of the species in the western Cape. Specimens from the extreme south-western corner of the Cape Province in the collection of the South African Museum (collected at Rondebosch, Durbanville, and Touws River) have the upper-parts dark greyish brown and the ventral surfaces rich cinnamon-buff, and the bill is long, measuring from 16–18 mm. These skins are closely matched by other examples before me from such widely scattered localities in the south and east as Knysna, Hanover, Cradock, Grahamstown, Queenstown, King William's Town, etc., and to the north of the Orange River in the east at Barkly West in Griqualand West. Specimens taken at Klaver, Port Nolloth, and at points on the lower Orange River, in the western and north-western Cape, and at Kalkfontein in southern Great Namaqualand, differ from the southern birds I have just dealt with in being paler cinnamon-buff below and greyer on the dorsal surfaces and they average slightly larger in size.

From the material available to me it appears that in the Cape Province there are two groups of populations worthy of recognition as races, namely, a richly coloured one confined to the southern and eastern districts, and a paler and duller group in the more arid regions of the west and north-west. It is customary to fix the type-locality of *S. r. rufescens* as the Olifants River, western Cape Province (a locality which must almost certainly be in the southernmost extremity of the range of the duller and paler of the two Cape races), because Levaillant states in his narrative that he first encountered the Crombec near that river. There is, of course, no evidence to the effect that the specimens obtained near the Olifants River were actually used for the illustrations, but even making allowance for artistic discrepancies and the use of worn material, it seems evident that the figures on p.135—which are the virtual *Types* of the *D. rufescens* of Vieillot—are only applicable to the race which I would distinguish from the dry areas of the western and north-western Cape, and this view is lent support by the material which is available to me from Klaver (a village almost on the Olifants River), and which can be taken as topotypical of *S. r. rufescens*. Klaver specimens are the same as those from Port Nolloth and other localities in Little Namaqualand, and from Bushmanland and southern Great Namaqualand. The paler and duller of the two Cape races is

therefore the nominate one, and the richer subspecies of the south and east, being without a name, is described below as *S. r. diverga*, subsp.nov.



Sketch map showing the approximate ranges of the South African races of the Crombec *Sylvietta rufescens* (Vieillot). 1. *S.r. rufescens*; 2. *S.r. ochrocar*a; 3. *S.r. diverga*; 4. *S.r. resurga*; 5. *S.r. flecki*; 6. *S.r. pallida*.

Material from Great Namaqualand is scarce in South African museums and it is not possible on the few skins available to arrive at any conclusions, but a single specimen from Great Brukaros Mountain is paler than a skin of *S. r. rufescens* from Kalkfontein in the south of the territory. That this is a progressive trend is clear from an examination of material from still further north in Damaraland. Specimens from Damaraland differ from *S. r. rufescens* as here defined in being paler and clearer grey on the upper-parts, but ventrally there is no prominent difference. Oberholser, "Smithsonian Miscellaneous Collections," xlvii, 1905, p.373, has proposed the name *S. r. ochrocar*a for the Damaraland populations, but the separation has to the best of my knowledge never been given support by workers. I am of the opinion that subspecific status should now be accorded the populations of Damaraland, and that the name conferred on them by Oberholser should be resurrected for this purpose. The Kaokoveld and Mossamedes populations may belong here, but I have seen no material.

In Ovamboland, and to the east of the range of *S. r. ochrocar*a, the populations show marked differences, the birds being more bluish grey above and rather richer cinnamon-buff below, and the bill is invariably shorter (usually about 15mm.) and straighter. Roberts, "Annals of the Transvaal Museum," vol. xvi, 1935, p.146, on the basis of a very large

series from all over Bechuanaland, states that the "birds from these localities are like those from the Transvaal," and this finding is confirmed by my own observations. I find that the populations of British Bechuanaland (northern Cape Province), the northern Orange Free State, the Transvaal (except the eastern lowlands), Bechuanaland Protectorate, extreme eastern districts of South-West Africa, Ovamboland, and most of Southern Rhodesia northwards to south-eastern Angola and the western parts of Northern Rhodesia are reasonably homogeneous, and, in my view, represent one race. Two names are available for this race, viz., *S. flecki* described from south of Lake Ngami, and *S. r. transvaalensis* described from the Rustenburg district of the Transvaal. As has just been shown, Transvaal and Bechuanaland birds are the same, and therefore this race must be known as *S. r. flecki* (1900), of which *S. r. transvaalensis* (1918) is a synonym.

To return to the long-billed and dorsally darker races of the south and west, it has recently been shown by Clancey, "Durban Museum Novitates," vol. iv., 4, 1953, pp.61-62, that the population resident to the east of the Drakensberg Range in Natal is distinguishable from adjacent forms and he has described this population as a new race under the name *S. r. resurga*. This race has the long bill of *S. r. rufescens* and its racial affines, the reddish ventral colouration of *S. r. diverga* (but throat whiter), and bluish grey upper-parts much as in *S. r. flecki*. Examination of still further material shows that *S. r. resurga* is a well-marked race with a somewhat circumscribed distribution in Natal (mainly interior) and southern Zululand.

From the area of northern Zululand, Swaziland, the eastern lowlands of the Transvaal, and southern Portuguese East Africa northwards to the Zambesi River and beyond in parts of Nyasaland west of the Nyasa Rift, and in parts of south-eastern Northern Rhodesia, occurs yet another group of populations worthy of racial rank. Birds of these populations most closely resemble *S. r. flecki* of the interior as defined earlier, but they are in series paler ventrally, the cheeks and throat are much whiter, and the centre of the abdomen is lighter. The superciliary stripes are also more fully developed in these eastern populations. This race has been fairly consistently supported by workers under the name available for it, i.e., *S. r. pallida*, which was described by Alexander on material collected on the Zambesi River between the towns of Tete and Chicowa.

To the north of the range of *S. r. pallida* occurs a still smaller race with brighter rufous under-parts which extends from the Lake Bangweulu region of Northern Rhodesia and the Katanga north to the Ruzizi Valley in the eastern Congo. This is the race described by Hermann Grote as *S. r. adelphe*.

On the basis of the data now available it would seem desirable to recognize no less than six races of *S. rufescens* from the South African sub-continent instead of the customary three. The races here recognized are reasonably well defined and constant, and it is remarkable that there has been so much uncertainty heretofore as to the full range of geographical variation, which incidentally follows closely that of so many other widely distributed polytypic South African species, although the finding of the palest race on the eastern side of the sub-continent is exceptional.

In order to assist workers not equipped with a wide range of South African material I have detailed the dorsal and ventral colouration readings of the various races, using the system perfected by C. and J. Villalobos, "Colour Atlas," 1947. The characters and ranges of the races recognized are as follows:

1. *Sylvietta rufescens rufescens* (Vieillot)

Dicaeum rufescens Vieillot, "Nouveau Dictionnaire d'Histoire, Naturelle," nouvelle édition, vol. ix, 1817, p.407: Olifants River western Cape Province, South Africa (ex Levaillant).

Upper-parts, wings and tail dark greyish brown (about 00S-6-2°); Entire ventral surface pale cinnamon-buff (about 00Y-14-5°). Superciliary stripes poorly developed.

Measurements : Wing ♂♂ 59-64, ♀♀ 59-61; culmen from base ♂♂ 16-18.5, ♀ 17mm. (Eight measured).

Range : The dry western and north-western districts of the Cape Province and the southern half of Great Namaqualand, South-West Africa. Intergrading to the north of its range with the next race and to the south and south-east with *S. r. diverga*.

2. *Sylvietta rufescens ochrocarra* Oberholser

Sylvietta rufescens ochrocarra Oberholser, "Smithsonian Miscellaneous Collections," xlvii, 1905, p.373: Damaraland, South-West Africa.

Similar to *S. r. rufescens* but upper-parts, wings and tail paler and greyer in series (about 00S-8-2°). Slightly richer below (about 00Y-13-5°). Larger.

Measurements : Wing ♂♂ 64-66.5, ♀♀ 60-62; culmen from base ♂♂ 16-18, ♀♀ 16.5-17mm. (Seven measured).

Range : The Damaraland plateau, South-West Africa. ? And the Kaokoveld and south-western Angola (Mossamedes). Replaced to the north and east of its ascertained range by *S. r. flecki*.

3. *Sylvietta rufescens diverga*, subsp. nov.

Darker above and on wings and tail than *S. r. rufescens* (about S0-5-1°), and on the under-parts richer cinnamon-buff (about 0-13-4°), and with the flanks and sides of the breast copiously suffused with dark greyish brown. Similar in size.

Measurements : Wing ♂♂ 59-65, ♀♀ 57.5-62; culmen from base ♂♂ 16.5-18, ♀♀ 16-17.5mm. (Eighteen measured).

Type : ♂ adult. Collected on Doornhoek Farm, near Cradock, eastern Cape Province, South Africa. 20 October, 1953. Collected by P. A. Clancey. In the Durban Museum. Wing (flattened), 65, culmen from base 16.5mm.

Range : The extreme south-western portion of the Cape Province eastwards through the Karroo districts to the eastern Cape, and northwards to the southern Orange Free State and Griqualand West. Intergrading to the north of its range in the east with *S. r. flecki*.

4. *Sylvietta rufescens resurga* Clancey.

Sylvietta rufescens resurga Clancey, "Durban Museum Novitates," vol. iv, 4, 1953, p.61: Weenan, Natal, South Africa.

Nearest to *S. r. diverga* but upper-parts much lighter, more bluish-grey (about $S0-10-1^{\circ}$); ventrally closely similar but whiter on the throat.

Measurements: Wing ♂♂ 62-67, ♀ 59.50 culmen from base ♂♂ 16-17.5, ♀ 16.5mm. (Six measured).

Range: Confined to Natal (mainly interior) and parts of southern Zululand. Intergrading to the north of its range with *S. r. pallida*.

5. *Sylvietta rufescens flecki* (Reichenow)

Sylviella flecki Reichenow, "Ornithologische Monatsberichte," vol. viii, 1900, p.22: Mutschumi (Machumi Pan), south of Lake Ngami, Bechuanaland Protectorate, of which *S. r. transvaalensis* Sclater and Mackworth-Praed, "Ibis," 1918, 4, p.667: Rustenburg, Transvaal, is a synonym.

Somewhat similar to *S. r. resurga* on upper-parts, wings and tail, but slightly paler; under-parts wholly buffish cinnamon without any white on throat (about $0-10-5^{\circ}$). Bill shorter and less decurved.

Measurements: Wing ♂♂ 60-67.5, ♀♀ 58-62; culmen base ♂♂ 14.5-16.5, ♀♀ 14-15.5mm. (Twenty-two measured).

Range: The interior of southern Africa. Ranges from the northern parts of the Cape Province (British Bechuanaland), northern Orange Free State, Transvaal (except eastern lowlands), Bechuanaland Protectorate, extreme eastern districts of South-West Africa (in the north as far west as Ondonga, Ovamboland), most of Southern Rhodesia and the Caprivi Strip northwards to south-eastern Angola and apparently most of western Northern Rhodesia. Intergrading with *S. r. adelphe* to the north of its range, and with *S. r. pallida* to the east.

6. *Sylvietta rufescens pallida* (Alexander)

Sylviella pallida Alexander, "Bulletin of the British Ornithologists' Club," vol. viii, 1899, p.48: between Tete and Chicowa on the Zambesi River, Portuguese East Africa.

Closely similar to *S. r. flecki* from which it differs in being markedly whiter on the cheeks, throat and centre of abdomen. Supercilia paler and more fully developed.

Measurements: Wing ♂♂ 60-65, ♀♀ 56-60; culmen from base ♂♂ 15-16.5, ♀♀ 14.5-15.5mm. (Twenty-two measured).

Range: The south-eastern districts of Northern Rhodesia to the south and east of the range of *S. r. adelphe*, and in Nyasaland west of the Nyasa Rift, southwards through the lower Zambesi River valley to southern Portuguese East Africa, parts of eastern Mashonaland, Southern Rhodesia, eastern lowlands of the Transvaal, Swaziland, and northern Zululand (Tongaland).

*Extra-limital race.****Sylvietta rufescens adelphe* Grote**

Sylvietta micrura adelphe Grote, "Ornithologische Monatsberichte," vol. xxxv, 1927, p.118: Baraka, north-western end of Lake Tanganyika, Belgian Congo.

Described as smaller than *S. r. pallida* (wing 56-61mm.) and brighter rufous on breast and abdomen. (Not examined).

Range : (After Chapin, "Birds of the Belgian Congo," vol. iii, 1953, p.263). From the Katanga, southern Belgian Congo, and Lake Bangweulu in north-eastern Northern Rhodesia north to the Ruzizi Valley in the eastern Congo.).

On a Possible Physiological Barrier between two Races of Song Thrush *Turdus ericetorum* Turton

By ALFRED HAZELWOOD and ERIC GORTON.

Received 11th March, 1954

During the very cold spell in February this year, we received a number of *Turdus ericetorum* Turton picked up in a dead or dying condition near Seaton, Devon.

These can readily be separated into phenotypes of *T. e. philomelos* Brehm and of the typical race and it is of interest to note that the gonadal development of either group was markedly different. The gonads of birds of either sex referable to *T. e. ericetorum* were well developed and little short of breeding condition while those of *T. e. philomelos* were still in complete recession.

Presumably, the Continental birds which occur in the British Isles in winter are, at least in the main, from more northerly latitudes and while the two races appear to mix in winter flocks, this physiological differentiation would prove an effective barrier to miscegenation.

This phenomenon is of course well known among discrete populations of the European Starling *Sturnus vulgaris* L. even where no conventional racial manifestations occur but the above is thought worthy of note because the opportunity of examining such truly comparable material seldom occurs.

Eight birds were examined, six skins prepared.

Forster's 1788 Genera

By CAPTAIN C. H. B. GRANT.

Received 29th March, 1954

The eighty-one genera given by Forster in his *Ench.Hist.Nat.* pp. 33 to 38, 1788, have been introduced into literature but NOT into nomenclature as no species are designated, only under 23 *Calloeas* (Great Wattle bird of New Zealand) does he give a reference to a particular species. Amongst the new genera by Forster is 76 *Gavia* on p.38, with the description "rostrum subulatum, compressum. Pedes palmati, tetradactyli."